

Claims

1. A method of monitoring the operation of a wind energy plant, wherein the monitoring comprises collection of blade-related operational data,
5 **characterised in** that, in at least one predefined point on the blade, a position indicator is arranged that can be used in a positioning system for identifying the position of the position indicator; and that the position of the position indicator and hence the position of the predefined point are determined and collected as a part of said blade-related operational data.
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2. A method according to claim 1, wherein the position of the at least one predefined point is used in a control- and regulation-algorithm for controlling the wind energy plant.
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3. A method according to claims 1-2, wherein the position of the at least one predefined point is used for determining material stresses in the blade by determining the flexing of the blade, wherein the method comprises the following steps:
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- comparison of the collected position of the predefined point to a predefined reference position of that point;
 - based on the comparison of the collected position to the reference position, determination of the flexing and hence the material stress on the basis of deviations between the collected position and the
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- reference position.
4. A method according to claim 3, wherein the at least one predefined reference position is/are determined and collected positions of the predefined point when the wind energy plant is in operation in a situation which is viewed
30 as being a reference situation.

5. A method according to claims 1-4, wherein the positioning system comprises one or more reference points wherein the positions of the reference points are known, and wherein the position(s) of the at least one point defined in advance on the blade is/are determined by use of the distance from the reference points to the position indicator arranged in the pre-defined point.

6. A method according to claim 5, where determination of the position of the at least one point defined in advance on the blade further comprises use of the position of the wind energy plant.

7. A system for monitoring the operation of a wind energy plant, wherein the system comprises means for collecting blade-related operational data, **characterised in that**, in at least one predefined point on the blade, a position indicator is arranged, wherein the position indicator can be used in a positioning system for identifying the position of the position indicator, and means for collecting blade-related operational data comprise means for collecting the position of the position indicator and hence the position of the predefined point.

8. A system according to claim 7, wherein the system comprises one or more reference points, wherein the positions of the reference points are known, and wherein the position(s) of the at least one point defined in advance on the blade is/are determined by use of the distance from the reference points to the position indicator arranged in the predefined point.

9. A system according to claims 7-8, wherein the positioning system is GPS, and wherein the position indicators are a GPS receiver.

10. A blade for a wind energy plant, wherein the blade enables monitoring of the operation of a wind energy plant, wherein the monitoring comprises

collection of blade-related operational data, **characterised in** that, in at least one predetermined point on the blade, a position indicator is arranged that can be used in a positioning system for identifying the position of the position indicator; and that the position of the position indicator and hence the position
5 of the predefined point are determined and collected as a part of said blade-related operational data.

11. A blade for a wind energy plant according to claim 10, wherein the positioning system is GPS; and wherein the position indicators are GPS
10 receivers.